

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 61-200851

(43)Date of publication of application : 05.09.1986

(51)Int.Cl.

B01J 19/08
B22F 9/30
C22B 5/20
H05H 1/24

(21)Application number : 60-041214

(71)Applicant : YOSHIZAWA AKINOBU
HATSUKOUSHIYA:KK

(22)Date of filing : 04.03.1985

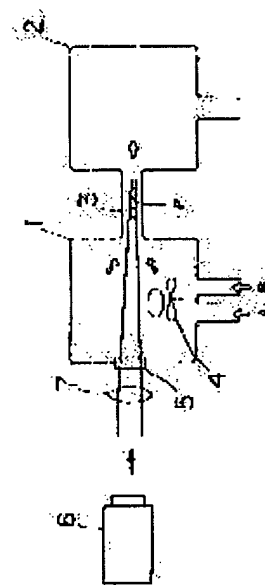
(72)Inventor : YOSHIZAWA AKINOBU

(54) METHOD AND APPARATUS FOR PREPARING FINE PARTICLE

(57)Abstract:

PURPOSE: To easily and efficiently form fine particles with a desired particle size, by generating the heat exciting reaction of a stock material not reacting at ambient temp. by dielectric breakdown plasma generated by condensing laser beam.

CONSTITUTION: CO₂-TEA laser beam from a laser oscillator 6 is one with about 0.5W1J/pulse class, a pulse lasting time of about 1 μ s and peak output of about 1MW and condensed by a lens 7 to generate ionization action due to an ultra- high electromagnetic field in the vicinity of the focus of said lens and laser induced dielectric breakdown plasma is generated in a tubular passage 3. If stock gases A, B, for example, SuCl₄ gas and O₂ gas mixed in a stock material container 1 are guided to the side of a product container 2 through the passage 3, the gaseous mixture generates heat exciting reaction by rapid heating due to LIDB plasma P in the tubular passage 3 to form fine particles which are, in turn, transferred to the container 2 while the shapes thereof are held by quenching due to heat extinction.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the
examiner's decision of rejection or application]

converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]